

I may add that in a Bat (*Pteropus medius*) I found the superior oblique to have a relation like that in the Lemur to the superior rectus, but the inferior oblique was close up to the corneal limit.

It may be also proper to state that these variations in the muscular attachments do not appear to depend in any definite manner on alterations in the position of the orbit. M. Broca, in the 'Revue d'Anthropologie,' 1877, p. 356, gives a table of the obliquity of the orbit in members of the Quadrumana, this obliquity being determined by measuring the angle between the base-line of the skull (in his series the base-line chosen is the plane of the foramen magnum) and the axis of the orbit. This axis is a line passing outwards and forwards from the optic foramen through the centre of the orbital aperture. From this direction of the axis it will be seen (*a*) that it does not correspond with the visual axis, (*b*) that its obliquity is made up of an obliquity to the median plane of the head and of an obliquity to the horizontal base-line of the skull.

As instances of the great varieties found in this angle, he gives the mean angle in Orang as $45^{\circ}62$, *Cercopithecus* $28^{\circ}43$, *Cebus* $22^{\circ}3$, *Myctes* $67^{\circ}17$, Lemurs $41^{\circ}05$.

It seems possible that a comparison of the angles between the two visual axes when the eyes are at rest, would be more likely to afford some explanation of the meaning of the gradual change in the relative position of the eye-muscles; and the direction of these axes it appears at present to be impossible accurately to ascertain.

5. On some Birds transmitted from the Samoan Islands by the Rev. T. Powell. By OSBERT SALVIN, M.A., F.R.S.

[Received January 6, 1879.]

The collection, which contained specimens of the following five species of birds, was placed in my hands by Mr. Selater, because there were two Petrels amongst them, a family of birds to which I have lately paid considerable attention. The skins were obtained by the Rev. Thomas Powell, of Faleatili, Upolu, Samoan Islands, during a visit to the islands of Tutuila and Manoa, the two easternmost islands of the group, and transmitted to Mr. Selater, with a request that he would have them named. This I have endeavoured to do, but have only succeeded in finding names for three of the five species, the other two being apparently undescribed:—

1. PINAROLESTES POWELLI, sp. nov.

Saturate brunneus, alis et cauda nigricantioribus; abdomine rufescenti-brunneo; rectricibus tribus utrinque extimis albo terminatis; rostro et pedibus plumbeo-corneis. Long. tot. 7.0, alæ 3.1, caudæ 3.2, tarsi 0.9, rostri a rictu 1.1.

Hab. Tutuila, Samoan Islands (*T. Powell*).

Obs. Sp. *P. vitiensi* affinis, sed major, alis et cauda saturatius brunneis.

This bird, for which I have been unable to find a name, belongs to the small section of this genus the members of which have white tips to the lateral tail-feathers. It certainly comes nearest the Fijian *P. vitiensis*, with the British-Museum specimens of which I have compared it. *P. heinii* is another allied species, but is still smaller than *P. vitiensis*, besides differing in other respects (*cf.* Sharpe, Cat. B. iii. p. 293 *et seq.*). Dr. Finsch and Mr. Sharpe, both of whom are conversant with the members of this genus, on examining this skin pronounced it to belong to an undescribed species. No *Pinarolestes* has hitherto been recorded from the Samoan Islands.

The type of this species, which I propose to dedicate to its discoverer, has been deposited in the British Museum.

Mr. Powell's letter gives the following account of this species:—

"Vernac. name, '*Sagaolevas*' (Sá-ngă-o-le-vás). A small agile bird. Length 7" from the point of the beak to the tip of the tail, wings rather longer than the body. Tail long, spreading. Feathers of the head, back, wings, and tail brownish black; the three outer tail-feathers on each side tipped with white; throat, breast, and belly brownish slate; sides brownish. Head large; feathers of the head erect. Appearance fierce; voice harsh. Beak long, strong; and slightly notched at the tip, furnished with bristles at the base; nostrils near the base, round, slanting backwards; gape wide. Tongue cartilaginous at the tip. Tarsi about 1" long. Toes, inner and outer nearly of a length, shorter than the middle, the hinder one of which is rather longer and stronger than the front one. Grasp strong.

"*Habits.* This bird flies round and round persons coming into its vicinity, keeping up a continual harsh cry, which the natives call scolding; it nevertheless keeps well out of arm's length, and dodges well. A native fired twenty times, and failed to get a specimen."

2. HALCYON SACRA.

Halcyon sacra (Gm.); Sharpe, Mon. Alced. p. 223, pl. 85.

Hab. Tutuila, Samoan Islands (*T. Powell*).

The specimen sent agrees accurately with the central figure in Mr. Sharpe's plate, which was drawn from a specimen said to have come from Tongataboo. Mr. Sharpe unites the birds from the Fiji, Friendly, and Samoan islands; and I follow him in so doing; but should the Samoan bird prove distinct, the name it should bear is *Halcyon pealii*, Finsch & Hartl. Orn. Centralpolyn. p. 38, it being the *Dacelo coronata*, Peale (*nec Müller*).

3. ANOUS CÆRULEUS.

Sterna cærulea, Bennett, Narr. Whaling Voy. ii. p. 248.

Anous cæruleus, Sharpe, P. Z. S. 1878, p. 272.

Hab. Tutuila, Samoan Islands (*T. Powell*).

The full synonymy of this species is given in Mr. Sharpe's Notes on Birds from the Ellice Islands (*l. c.*). Mr. Powell gives the total length as 10 inches, and the expanse of the wings as 20 inches. The native name in Samoa is "Laia." He says the bird is abundant in some parts of Tutuila.

4. *FREGETTA MÆSTISSIMA*, sp. n.

Omnino fuliginoso-nigrescens, alis et cauda nigricantioribus; alis longissimis, cauda valde furcata; rectricibus latissimis; tarsis elongatis; digitis fere æqualibus, phalangibus proximis complanatis. Long. tota 9·5, alæ 9·1, caudæ rectr. med. 3·2, lat. 4·2, tarsi 1·9, dig. med. cum ungue 1·3, rostri a rictu 0·9.

Hab. Samoan Islands (*T. Powell*).

Obs. Species *F. melanogastræ* congenerica, sed ab omnibus vestitu unicolori nigrescente distinguenda.

In the 'Proceedings' of last year (*P. Z. S.* 1877, p. 722) Dr. Finsch described a Petrel under the name of *Procellaria albogularis* from the Fiji Islands, which is evidently a near ally of the present bird. This bird, however, differs in having the chin, belly, and upper tail-coverts white, and in some other respects. Of Dr. Finsch's bird I have before me a specimen obtained in Aneiteum, New Hebrides, as long ago as January 1860, I believe by the late John Macgillivray. Curiously enough, it bears the MS. name *albogularis*, selected for it by Dr. Finsch seventeen years subsequently. The native name given in Aneiteum to this bird is "Nichitterin," as the label records.

A similar specimen is in the British Museum, and another in the Leyden Museum. In both places the birds are referred to *Procellaria tropica*, Gould; and all references to *P. tropica* from the Pacific Ocean apply to it. But *Fregetta albogularis* is considerably larger than *P. tropica*, and has a more deeply forked tail than that bird, besides the tail-feathers themselves being much wider. It is doubtful whether *P. tropica*, the original specimens of which were obtained by Mr. Gould himself in the Atlantic Ocean, is really separable from *F. melanogastra*. Mr. Sharpe has already united them under the former name (*Trans.-Venus Exp. Birds*, p. 30.) The following references relate to Dr. Finsch's *Procellaria albogularis*:—

Procellaria tropica, Bp. C. R. xli. p. 4 (nec Gould). 1112

Fregetta tropica, Bp. Consp. ii. p. 197 (nec Gould).

Procellaria tropica, Schl. Mus. P. B., *Procell.* p. 4.

Fregetta tropica, Coues, Pr. Ac. Phil. 1864, p. 85 (? partim).

"*Procellaria torquata*, Macgill," G. R. Gray, Hand-list, iii. p. 104 (nec Macgill!).

Thalassidroma albogularis, Macgill. MS.

Procellaria albogularis, Finsch (mot. prop.!), *P. Z. S.* 1877, p. 722.

Oceanites tropica, Sharpe, *Trans.-Venus Exp.* p. 30 (partim).

The native name of *Fregetta mæstissima* in Samoa is Seu-ta-peau; and of its habits Mr. Powell says:—"They often float on the sea in great numbers. They inhabit all the islands of the group, but are most abundant on Manua. They sleep in holes under the trunks of trees at an elevation of 2500 feet, whence they are taken with dogs, which scent them. They are easily extracted from their holes."

5. PUFFINUS OBSCURUS.

Procellaria obscura, Gm. Syst. Nat. i. p. 559.

Puffinus obscurus, Finsch, Journ. Mus. Godeff. Heft xii. p. 40.

Hab. Manua, Samoan Islands (*T. Powell*).

Native name "Taio," = Taiko.

Mr. Powell says that these birds are found in the mountains of Manua in holes, as in the case of the Seu-ta-peau (i.e. *F. mæstissima*). The natives are very fond of them, and catch and consume great numbers, hunting them with dogs. He gives the dimensions of the specimen sent as follows:—Length 12·6 inches from the tip of the bill to the tip of the tail; bill 1·3; tail 3·3; middle and outer toe 1·8; inner toe 1·5; tarsus 1·6 (black on the outer side, bluish black on the inner); expanse from tip to tip of wings 2 feet 2 inches.

6. On the Use of the generic Name *Gouldia* in Zoology.
By W. H. DALL, Smithsonian Institution.

[Received January 7, 1879.]

Until within a few days I have never been able to point to the exact place where the late Prof. C. B. Adams described his genus *Gouldia*; and most foreign naturalists have supposed that its first appearance was in Jay's Catalogue of Shells of January 1850. According to Marschall's continuation of the 'Nomenclator Zoologicus,' a genus *Gouldia* (*Trochilidæ*) was proposed by "Ch. Bonaparte in Paris Acad. 1850," while another authority places the date of the description in 1849. On this account Mr. Guppy of Trinidad, W. I., proposed to substitute *Crassinella* for the molluscan *Gouldia* of C. B. Adams. I believe this name has somewhere been used by T. A. Conrad for some fossil allied to *Astarte*; but I have not been able to find the reference yet. It is, however, of no consequence, since, even had *Gouldia*, C. B. Ad., been untenable, there are several synonyms which are prior to *Crassinella*, Guppy, for that genus.

I am glad to be able to state definitely, at last, the place of description and date of *Gouldia*, C. B. Ad., and to establish it on a permanent footing, especially as the eminent naturalist from whom it was named was one to whom I owe a lasting debt of gratitude and affection for the almost paternal kindness with which he forwarded my first attempts at the study of natural history.

The story is most briefly told in a few paragraphs of synonymical references.

Genus GOULDIA, C. B. Adams.

Thetis, C. B. Ad. 1845, Proc. Bost. Soc. Nat. Hist. ii. p. 9 (Jan. 1845). Genus described, with two species, *T. cerina* and *T. parva*, from Jamaica. Not *Thetis*, J. Sowerby, Min. Conch. t. 513, 1826.

Gouldia, C. B. Ad. (in) Cat. of Genera and Species of recent